

Serial No. 09/921,438

Page 2

REMARKS

This amendment is in response to the Office Action mailed on October 2, 2002, wherein Claims 1-20 were rejected. Claims 1-20 remain pending.

Claim Rejections Under 35 USC §112

On page 2 of the Office Action, the Examiner rejected Claims 5 and 17 under 35 USC §112 as being indefinite. Applicants have amended Claims 5 and 17 to better describe the present invention.

Claim Rejections Under 35 USC §102 and 103

On page 2 of the Office Action, the Examiner rejected Claims 1, 6-11 and 13 under 35 USC §102(b) as being anticipated by Muller-Berner. On page 3 of the Office Action, the Examiner rejected Claims 2-5 and 14-20 under 35 USC §103 as being unpatentable over Muller-Berner in view of Pouring.

The Examiner stated in the Office Action that Muller-Berner discloses a target wheel having a plurality of teeth, said teeth having variable widths, and said teeth having rising edges distributed in nonuniform fashion and falling edges distributed in uniform fashion. Column 4, lines 5-23 of Muller-Berner discloses only a toothed arrangement on a flywheel and is completely silent with respect to a target wheel having teeth with variable widths, and the teeth having rising edges distributed in non-uniform fashion and falling edges distributed in uniform fashion. With respect to Figure 3, references 16 and 17 of Muller-Berner, the teeth, as best can be made out from the drawing, are distributed in uniform fashion and have uniform dimensions, with a zero pulse marking the zero position of the crank. This is typical of the art in the early 1970s where simple encoders were used to count pulses (to determine position) on a target wheel with the zero pulse providing a reference position. Furthermore, Muller-Berner is completely silent with respect to a cam phaser. There is no valve overlap control disclosed in Muller-Berner.

Serial No. 09/921,438

Page 3

The Examiner has failed to explain how and why the claimed subject matter is rendered unpatentable over the prior art and point out where each of the specific limitations recited in the rejected claims is found in the prior art relied on.

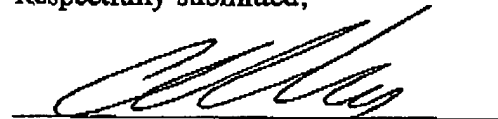
If the Examiner relies on personal knowledge that the method or apparatus of the present invention is obvious, Applicants respectfully request support for this assertion in the form of an affidavit that shall be subject to contradiction or explanation by the affidavits of the Applicants and other persons under 37 C.F.R. 1.104 (d)(2).

Conclusion

The entire Office Action dated October 2, 2002 has been carefully reviewed, and this response is submitted as being fully responsive thereto. In view of the preceding remarks, Applicants respectfully submit that Claims 1-20 are in condition for allowance and respectfully request such action at the Examiner's earliest convenience. If the Examiner believes that personal contact would be advantageous to the disposition of this case, he is requested to call the undersigned at his earliest convenience.

If for some reason a fee needs to be paid, please charge Deposit Account No. 07-0960 for the fees which may be due.

Respectfully submitted,



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Serial No. 09/921,438

Page 4

Version with Markings to Show Changes

5. (Amended) The target wheel of Claim 1 wherein at least six of said teeth create a [unique] pulse combination indicating the position of [the] said target wheel.

17. (Amended) The internal combustion engine of Claim 16 wherein at least six of said fifty-eight teeth form a [unique] combination indicating the position of said target wheel, whereby engine synchronization may be determined from said at least six teeth.

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